advancedligo

DCC Number: E070285-01-D
Date Prepared: 11/9/07

| Originator | Cognizant Engineer | Ext./Phone# | Project | Account Number |
|---|---|---|---|---|
| Name Jeff Kissel | Ken Mason | 617-324-5250 | ELIGO HAM SEI | |

| Dwg/Part Number | Rev | Part Description / Material | Qty |
|---|---|---|---|
| D071009 | | Particle fence, AL 6061 | 3 |
| D071160 | | Sensor Target Mount, AL 6061 | 7 |
| D071161 | | Sensor Head Base, AL 6061 | 7 |
| D071162 | | Sensor Head Washer, AL 6061 | 6 |
| D071163 | | Sensor Head Mount, AL 6061 | 6 |
| D071164 | | Sensor Head Base Plate, AL 6061 | 6 |
| D071165 | | Sensor Target-- AL 1100 DIAMOND TURNED FINISH- TAKE CARE IN CLEANING | 8 |
| D071166 | | Sensor Target Body, AL 6061 | 9 |
| D071170 | | Sensor Head Standoff, Horiz., AL 6061 | 3 |
| D071175 | | Sensor Head Bracket, Vert., AL 6061 | 3 |
| D071183 | | GS-13 Cable Restraint, AL 6061 | 8 |

| Used In (next higher assembly): | |
|---|---|

| Vendor Name | PO/Contract Number |
|---|---|
| HPD | |

**Data Package, Receiving/Inspection Remarks:**

| Inspection Required Y/N | Visual Damage Y/N | Comments | Name/ Initials | Date Comp. |
|---|---|---|---|---|
| | | | Bob Taylor | Digitally signed by Bob Taylor DN: cn=Bob Taylor, o=Caltech, ou=CIT LIGO, email=taylor_r@ligo.caltech.edu, c=US Date: 2007.11.27 08:37:25 -08'00' |

**Process Flow:**

| # | Operation | Start Date | Work Area | Instructions | Name/ Initials | Date Comp. |
|---|---|---|---|---|---|---|

N.B.: A copy of this traveller must be submitted to the DCC each time the original is shipped with the associated part(s) and when the traveller has been completed.

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| # | Operation | Start Date | Work Area | Instructions | Name/ Initials | Date Comp. |
|---|---|---|---|---|---|---|
| 1 | Clean | | Caltech | ○ clean per E960022: Ultrasonic clean in Liquinox[1] for 10 minutes.<br>○ Rinse in distilled water at least 3 times, changing the rinse water every time.<br>○ Ultrasonic clean in methanol for 10 minutes. | Bob Taylor | Digitally signed by Bob Taylor DN: cn=Bob Taylor, o=Caltech, ou=CIT LIGO, email=taylor_r@ligo.caltech.edu, c=US Date: 2007.11.29 10:47:25 -08'00' |
| 2 | Vacuum Bake | | | per E960022: 120°C, 48 hrs | Bob Taylor | |
| 3 | Control Point | | | Review/Approve RGA scan | Dennis Coyne | |
| 4 | Wrap & Tag vacuum clean parts | | | | Bob Taylor | Digitally signed by Bob Taylor DN: cn=Bob Taylor, o=Caltech, ou=CIT LIGO, email=taylor_r@ligo.caltech.edu, c=US Date: 2007.12.05 07:02:11 -08'00' |
| 5 | Ship and Deliver/File paperwork | | | Please send to:<br>LLO<br>c/o Ken Mason<br><br>File one copy of traveler with the DCC.<br>**Note: Ship original traveler with these parts.** | | |
| END: Go to Traveler or procedure associated with next higher assembly processing | | | | | | |

**Special Instructions (Handling/Packaging Constraints, Remarks, etc.) or Notes:**

These are aluminum for the enhanced LIGO HAM SEI at Livingston.
They're needed by Mid to Late November 2007.

[1] Standard Liquinox solution is 1 tablespoon in 1 gallon of water.

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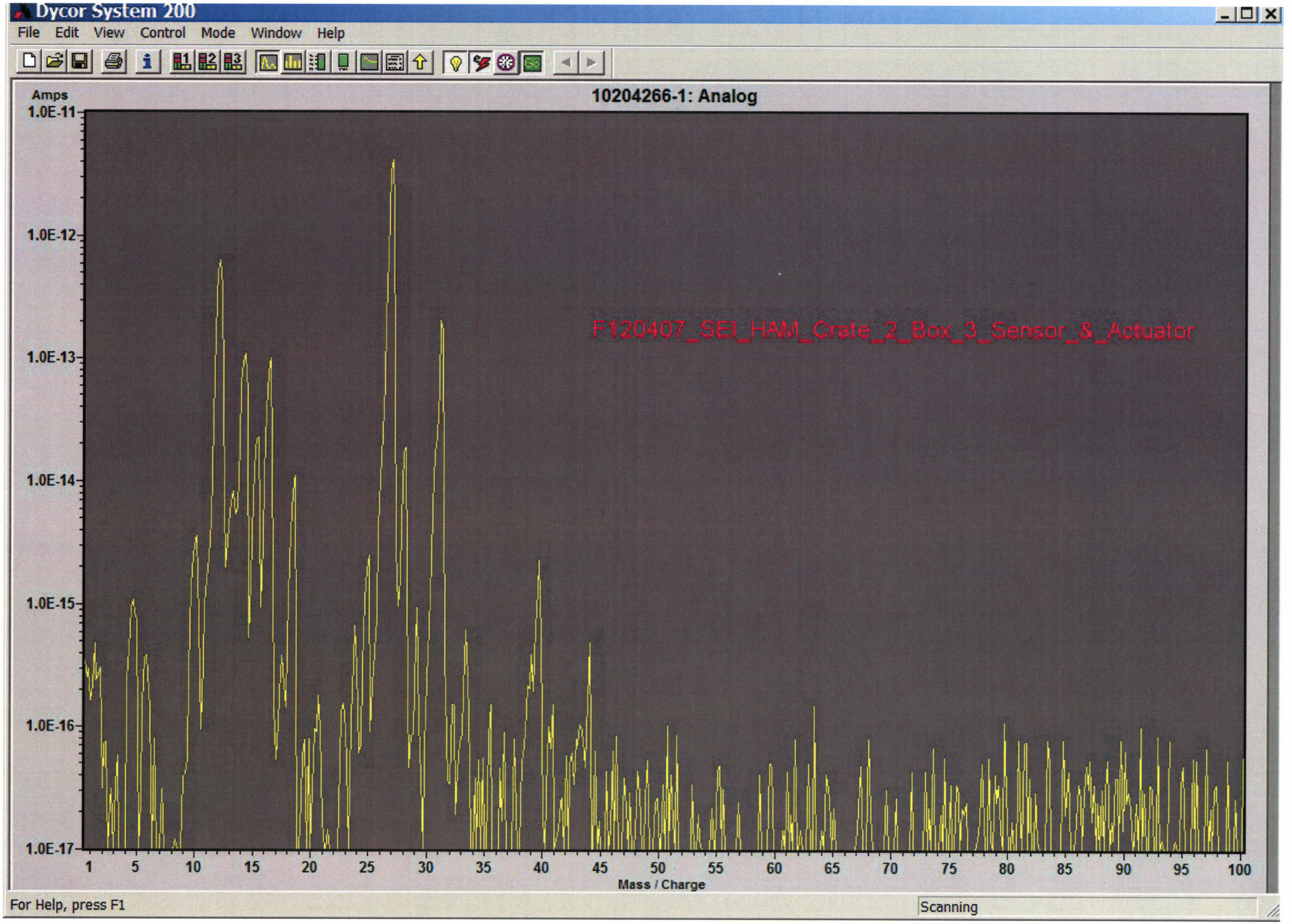
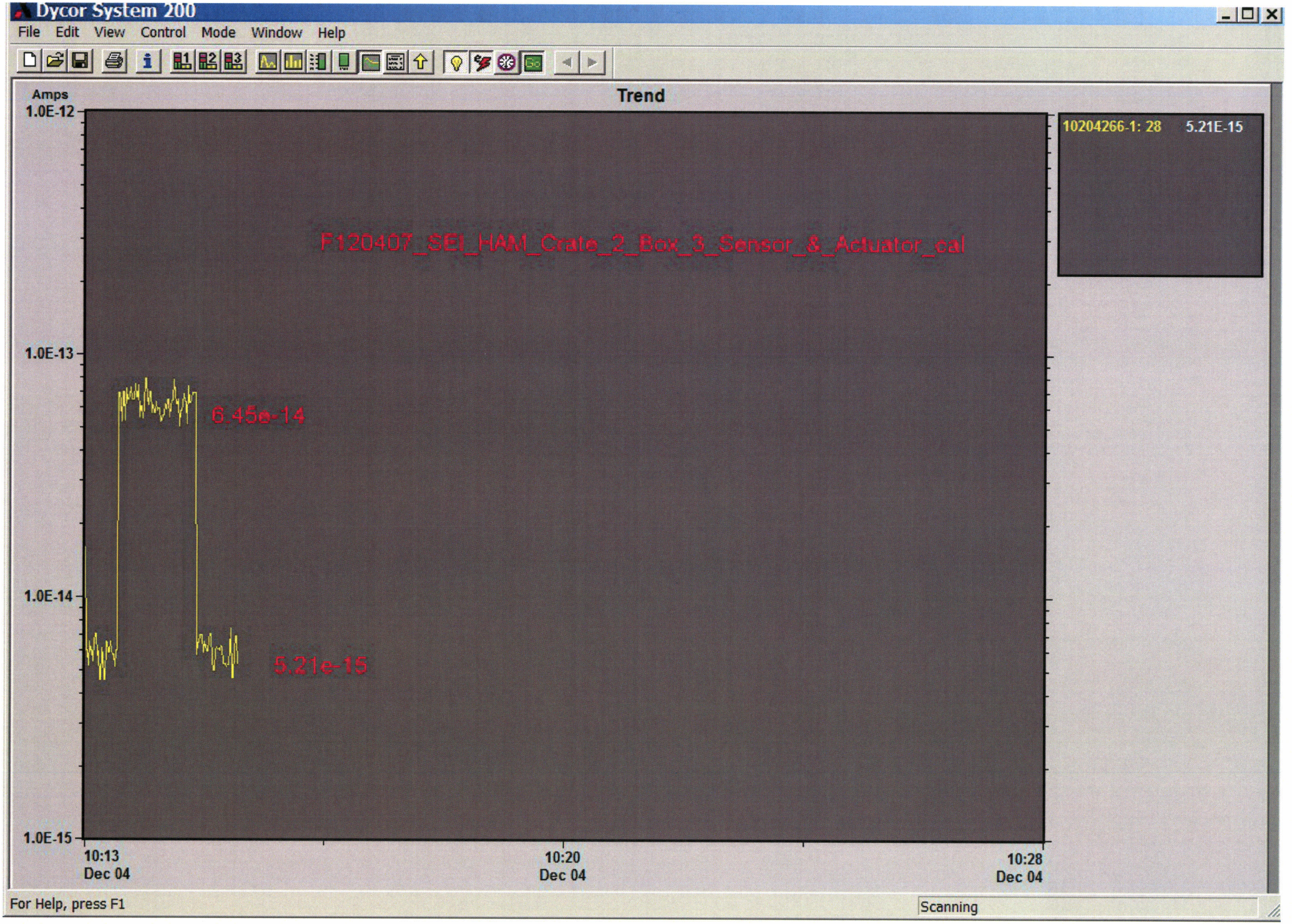

Dycor System 200
File Edit View Control Mode Window Help
10204266-1: Analog
Amps
1.0E-11
1.0E-12
1.0E-13
1.0E-14
1.0E-15
1.0E-16
1.0E-17
F120407_SEI_HAM_Crate_2_Box_3_Sensor_&_Actuator
1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
Mass / Charge
For Help, press F1
Scanning


Dycor System 200
File Edit View Control Mode Window Help
Amps
Trend
1.0E-12
1.0E-13
1.0E-14
1.0E-15
10204266-1: 28 5.21E-15
F120407_SEI_HAM_Crate_2_Box_3_Sensor_&_Actuator_cal
6.45e-14
5.21e-15
10:13
Dec 04
10:20
Dec 04
10:28
Dec 04
For Help, press F1
Scanning

# Pressure Contribution from Flag Hydrocarbons

## 40M Lab RGA Scan Results

Job# F120407 Description: SEI Ham Crate 1,Box2, Sensor,& Act Date: 12/4/2007

Oven Used: C

| | | | |
|---|---|---|---|
| AMU 41 | 1.50E-16 | amps | from RGA scan listing |
| AMU 43 | 1.00E-16 | amps | from RGA scan listing |
| AMU 53 | 3.50E-17 | amps | from RGA scan listing |
| AMU 55 | 2.00E-17 | amps | from RGA scan listing |
| AMU 57 | 2.00E-17 | amps | from RGA scan listing |
| Sum Flag H/C AMUs | 3.25E-16 | amps | |
| Calib leak rate | 2.36E-10 | torr l/s | (Argon) |
| AMU 40 (w/leak open) | 6.45E-14 | amps | |
| AMU 40 (background) | 5.21E-15 | amps | |
| Calib leak contributes | 5.93E-14 | amps | = (w/leak open) - (background) |
| Flag H/C Outgassing | 1.294E-12 | torr l/s | = (Sum Flag H/C AMUs) x (Calib leak rate)/(Calib leak contrib.) |
| Test item surf area | 1.00E+04 | cm2 | |
| Normalized outgassing | 1.294E-16 | torr l/s-cm2 | = Flag H/C Outgassing/Test item surf area |

Full description: see travelers; E070295-00 , E070285-00 , And some parts ar on Traveler E070236-00 marked with *. ( all aluminum parts)

Pre-scan bake: 120C for 48Hrs